AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1.   (Currently Amended)   A method for providing advanced signal processing in a wireless local area network that requires an interframe period between data and an acknowledgement for compatibility, wherein a duration of said interframe period is shorter than a duration that is required to perform said advanced signal processing, comprising:

transmitting a header using a first transceiver;

specifying a first data field in said header that enables said advanced signal processing mode; and

specifying a second data field in said header that defines a data time period and an extension time period, wherein said extension time period is associated with dummy data transmission.

2.   (Original)   The method of claim 1 wherein said first data field is a signal portion of said header.

3.   (Original)   The method of claim 1 wherein said second data field is a length portion of said header.

4.   (Original)   The method of claim 1 further comprising transmitting data after said header during said data time period.

5.   (Canceled)

6.   (Currently Amended)   The method of claim [[5]] further comprising receiving said header portion at a second transceiver that is located remotely from said first transceiver.

7.   (Currently Amended)   The method of claim 6 further comprising initiating receiver processing ~~including~~ associated with said advanced signal processing mode during said extension time period.

8.   (Currently Amended)   The method of claim 1 wherein said advanced signal processing mode includes advanced error coding.

9.   (Currently Amended)   The method of claim 1 wherein said advanced signal processing mode includes at least one of Turbo coding, Reed-Solomon coding, and convolution coding.

10.   (Original)   The method of claim 1 wherein said interframe period includes time allocated for receiver delay, receiver processing delay, media access control delay, and receiver/transmitter transition delay.

11.   (Original)   The method of claim 10 wherein a time period for said receiver delay and said receiver processing delay are increased by said extension time period.

12.   (Original)   The method of claim 1 wherein said interframe period is specified by at least one of IEEE section 802.11, 802.11(a) and 802.11(b).

13.   (Currently Amended)   A method for operating a wireless local area network (WLAN), comprising:

providing a first WLAN transceiver with advanced signal processing capabilities;

providing a second WLAN transceiver with advanced signal processing capabilities, wherein a maximum interframe period between data and an acknowledgement is required for compatibility, and wherein a duration of said interframe period is shorter than a duration that is required to perform said advanced signal processing mode;

transmitting a header and data using [[a]]said first WLAN transceiver;

specifying a first data field in said header that enables indicates said advanced signal processing mode; and

specifying a second data field in said header that defines a data time period and an extension time period.

14.   (Original)   The method of claim 13 wherein said first data field is a signal portion of said header.

15.   (Original)   The method of claim 13 wherein said second data field is a length portion of said header.

16.   (Original)   The method of claim 13 further comprising transmitting data after said header during said data time period.

17.   (Original)   The method of claim 16 further comprising transmitting dummy data after said data during said extension time period.

18.   (Original)   The method of claim 17 further comprising receiving said header portion at said second WLAN transceiver that is located remotely from said first WLAN transceiver.

19.   (Currently Amended)   The method of claim 18 further comprising initiating receiver processing ~~including~~ associated with said advanced signal processing mode during said extension time period.

20.   (Original)   The method of claim 13 wherein said advanced signal processing includes advanced error coding.

21.   (Original)   The method of claim 13 wherein said advanced signal processing includes at least one of Turbo coding, Reed-Solomon coding, and convolution coding.

22.   (Original)   The method of claim 13 wherein said interframe period includes time allocated for receiver delay, receiver processing delay, media access control delay, and receiver/transmitter transition delay.

23.   (Original)   The method of claim 22 wherein a time period for said receiver delay and said receiver processing delay are increased by said extension time period.

24.   (Original)   The method of claim 13 wherein said interframe period is specified by at least one of IEEE sections 802.11, 802.11(a) and 802.11(b).

25.   (New)   The method of claim 1 wherein said extension time period allows additional processing time for said advanced signal processing mode.

26.   (New)   The method of claim 1 wherein said extension time period allows for said advanced signal processing mode without extending said interframe period.

27. (New) A method for providing advanced signal processing in a wireless local area network that requires an interframe period between data and an acknowledgement for compatibility, wherein a duration of said interframe period is shorter than a duration that is required to perform said advanced signal processing, comprising:

transmitting a header using a first transceiver;

specifying a first data field in said header that indicates an advanced signal processing mode; and

specifying a second data field in said header that defines a data time period and an extension time period, which provides additional processing time for said advanced signal processing mode.

28. (New) The method of claim 27 wherein said extension time period allows additional processing time for said advanced signal processing mode.

29. (New) The method of claim 27 wherein said extension time period allows for said advanced signal processing mode without extending said interframe period.

30. (New) A method for operating a wireless local area network (WLAN), comprising:

providing a WLAN transceiver with advanced signal processing capabilities, wherein a maximum interframe period between data and an acknowledgement is

required for compatibility, and wherein a duration of said interframe period is shorter than a duration that is required to perform said advanced signal processing mode; and

receiving a header and data via said WLAN transceiver;

wherein said header specifies a first data field, which indicates said advanced signal processing mode, and specifies a second data field, which defines a data time period and an extension time period.